Amendments to the Claims

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein the adhesive tie layer comprises about 25-65% by weight component (a), up to 65% by weight component (b) and about 10-50% by weight component (c), wherein all percentages are based on the total weight of the adhesive tie layer.
5. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein the adhesive tie layer comprises about 25-65% component (a), about 25-65% by weight component (b) and about 10-50% by weight component (c), wherein all percentages are based on the total weight of the adhesive tie layer.
6. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein the first outer layer comprises a polar polymer selected from the group consisting of: polyvinylchloride homopolymer and copolymers, acrylonitrile-butadiene-styrene (ABS), polyvinylidene dichloride (PVDC), poly(ethylene terephthalate) (PET) homopolymer or copolymers, polyamides, polycarbonate, ethylene vinyl alcohol homopolymer and copolymers, acid copolymers, ionomers, liquid crystalline polymers, polyacetals, acetal copolymers, and polylactic acid.
7. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein the second outer layer comprises a non-polar polymer selected from the group consisting of: polypropylene homopolymer and copolymers, and polyethylene homopolymer and copolymers.
8. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein the copolyester elastomer comprises a segmented thermoplastic ether-ester elastomer exhibiting a shore D hardness of about 55 or less and having soft segments comprising polytetramethylene glycol (PTMEG).
9. (Cancelled)
10. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein the first outer layer comprises PVC and the second outer layer comprises polypropylene homopolymer.
11. (Cancelled).
12. (Cancelled).

13. (Currently amended) Exterior siding for buildings comprising the multi-layer polymer composition of claim ~~11~~ 17.

14. (Currently amended) The exterior siding of claim 13 wherein the first outer layer of said multi-layer polymer composition comprises ~~of~~ PVC and said first outer layer comprises the exterior surface of the siding.

15. (Currently amended) An article comprising the multi-layer polymer composition of claim ~~11~~ 17 wherein the article is selected from the group consisting of: construction materials, automobile interior parts, and toys.

16. (Currently amended) The multi-layer polymer composition of claim ~~11~~ 17 wherein the polymer composition is made by a process selected from the group consisting of: coextrusion and lamination.

17. (Currently amended) ~~The multi-layer polymer composition of claim 1~~ A multi-layer polymer composition comprising

(1) a first outer layer,

(2) a second outer layer and

(3) an adhesive tie layer between the two outer layers,

wherein the first outer layer comprises a polar polymer, the second outer layer comprises a non-polar polymer, and the adhesive tie layer comprises (a) a copolyester elastomer that is totally or partially miscible with the polar polymer of the first outer layer, (b) a non-polar polymer that is totally or partially miscible with the non-polar polymer of the second outer layer and ~~wherein component~~ (c) ~~comprises an~~ a copolymer selected from the group consisting of acid copolymers or anhydrides derived from ~~an~~ acid copolymers wherein said copolymers or anhydrides derived from acid copolymers are totally or partially miscible with the non-polar polymer of the second outer layer.

18. (Currently amended) The multi-layer polymer composition of claim ~~1~~ 17 wherein component (c) comprises maleic-anhydride-grafted polypropylene.

19. (Withdrawn) A process for making a multi-layer polymer comprising the step of coextruding the following layers to form a multi-layer polymer:

(1) a first outer layer,

(2) a second outer layer and

(3) an adhesive tie layer between the two outer layers,

wherein the first outer layer comprises a polar polymer, the second outer layer comprises a non-polar polymer, and the adhesive tie layer comprises

(a) a copolyester elastomer that is totally or partially miscible with the polar polymer, (b) a non-polar polymer that is totally or partially miscible with the non-polar polymer in the second outer layer and (c) a copolymer that contains functional groups capable of reaction with the functional end groups of component (a) and that is totally or partially miscible with the non-polar polymer in the second outer layer.

20. (Withdrawn) The process of claim 19 wherein the first outer layer comprises PVC, the second outer layer comprises polypropylene homopolymer, and the adhesive tie layer comprises about 25-65% by weight of a copolyester elastomer comprising a segmented thermoplastic ether-ester elastomer having soft segments comprising polytetramethylene glycol (PTMEG) and a shore D hardness of about 55 or less, about 10-50% by weight polypropylene, and about 25-65% by weight EnBAGMA, wherein all weight percentages are based on the total weight of the adhesive tie layer.

21. (Withdrawn) A process for making a multi-layer polymer comprising the step of laminating:

(1) a first outer layer,

(2) a second outer layer and

(3) an adhesive tie layer between the two outer layers,

under sufficient heat and pressure to fuse the layers and form a multi-layer polymer, wherein the first outer layer comprises a polar polymer, the second outer layer comprises a non-polar polymer, and the adhesive tie layer comprises

(a) a copolyester elastomer that is totally or partially miscible with the polar polymer, (b) a non-polar polymer that is totally or partially miscible with the non-polar polymer in the second outer layer and (c) a copolymer that contains functional groups capable of reaction with the functional end groups of component (a) and that is totally or partially miscible with the non-polar polymer in the second outer layer.

22. (Withdrawn) The process of claim 21 wherein the first outer layer comprises PVC, the second outer layer comprises polypropylene homopolymer, and the adhesive tie layer comprises about 25-65% by weight of a copolyester elastomer comprising a segmented thermoplastic ether-ester elastomer having soft segments comprising polytetramethylene glycol (PTMEG) and a shore D hardness of about 55 or less, about 10-50% by weight polypropylene, and about 25-65% by weight EnBAGMA, wherein all weight percentages are based on the total weight of the adhesive tie layer.

23. (Currently amended) A multi-layer polymer composition ~~of Claim 1~~ having

(1) a first outer layer having an interior surface and an exterior surface,

(2) a second outer layer having an interior surface and an exterior surface and

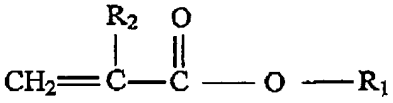
(3) an adhesive tie layer disposed between the two outer layers,

wherein the first outer layer comprises a polar polymer, the second outer layer comprises a non-polar polymer ~~wherein an~~ and the adhesive tie layer ~~between the two outer layers~~ contacts the interior surface of the first outer layer and the interior surface of the second outer layer, the adhesive tie layer comprising (a) a copolyester elastomer that is totally or partially miscible with the polar polymer of the first outer layer, (b) a non-polar polymer that is totally or partially miscible with the non-polar polymer of the second outer layer and (c) a copolymer that contains functional groups capable of reaction with the functional end groups of component (a) and that is totally or partially miscible with the non-polar polymer of the second outer layer.

24. (New) The multi-layer polymer composition of claim 23 wherein component (c) of the adhesive tie layer comprises an ethylene copolymer of the formula E/X/Y, wherein

E is the radical formed from ethylene and comprises about 40-90 weight % of the ethylene copolymer,

X is the radical formed from



wherein R_1 is an alkyl group with 1-8 carbon atoms,

R_2 is selected from the group consisting of H, CH_3 or C_2H_5 and X comprises about 0-40 weight percent of the ethylene copolymer and

Y is selected from the group consisting of glycidyl methacrylate and glycidyl acrylate, and

Y comprises 0.1-20 weight percent of the ethylene copolymer.

25. (New) The multi-layer polymer composition of claim 23 wherein the adhesive tie layer comprises about 25-65% by weight component (a), up to 65% by weight component (b) and about 10-50% by weight component (c), wherein all percentages are based on the total weight of the adhesive tie layer.

26. (New) The multi-layer polymer composition of claim 23 wherein the adhesive tie layer comprises about 25-65% component (a), about 25-65% by weight component (b) and about 10-50% by weight component (c), wherein all percentages are based on the total weight of the adhesive tie layer.

27. (New) The multi-layer polymer composition of claim 23 wherein the first outer layer comprises a polar polymer selected from the group consisting of: polyvinylchloride homopolymer and copolymers, acrylonitrile-butadiene-styrene (ABS), polyvinylidene dichloride (PVDC), poly(ethylene terephthalate) (PET) homopolymer or copolymers, polyamides, polycarbonate, ethylene vinyl alcohol homopolymer and copolymers, acid copolymers, ionomers, liquid crystalline polymers, polyacetals, acetal copolymers, and polylactic acid.

28. (New) The multi-layer polymer composition of claim 23 wherein the second outer layer comprises a non-polar polymer selected from the group consisting of: polypropylene homopolymer and copolymers, and polyethylene homopolymer and copolymers.

29. (New) The multi-layer polymer composition of claim 23 wherein the copolyester elastomer comprises a segmented thermoplastic ether-ester elastomer exhibiting a Shore D hardness of about 55 or less and having soft segments comprising polytetramethylene glycol (PTMEG).

30. (New) The multi-layer polymer composition of claim 23 wherein the first outer layer comprises PVC and the second outer layer comprises polypropylene homopolymer.

31. (New) The multi-layer polymer composition of claim 23 wherein the multi-layer polymer demonstrates a peel strength as tested using ASTM D903-98 greater than about 5 lbs/in width (0.09 kg/mm width).

32. (New) Exterior siding for buildings comprising the multi-layer polymer composition of Claim 23.

33. (New) The exterior siding of Claim 32 wherein the first outer layer of said multi-layer composition comprises PVC and wherein said first outer layer comprises the exterior surface of the siding.

34. (New) An article comprising the multi-layer polymer composition of Claim 23 wherein the article is selected from the group consisting of: construction materials, automobile interior parts, and toys.

35. (New) The multi-layer polymer composition of Claim 23 wherein the polymer composition is made by a coextrusion process.